DOCUMENT RESUME

ED 450 781 IR 058 037

AUTHOR	Nwalo, Kenneth Ivo Ngozi
TITLE	Managing Information for Development in the 21st Century: Prospects for African Libraries, Challenges to the World.
PUB DATE	2000-08-00
NOTE	16p.; In: IFLA Council and General Conference: Conference Proceedings (66th, Jerusalem, Israel, August 13-18, 2000); see IR 057 981.
AVAILABLE FROM	For full text: http://www.ifla.org/IV/ifla66/papers/012-114e.htm.
PUB TYPE	Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Developing Nations; Economic Development; Foreign Countries; Futures (of Society); *Information Management; *Information Technology; Library Automation; Library Development; *Library Role; *Library Services; Modernization
IDENTIFIERS	Africa

ABSTRACT

This paper discusses the role information can play in the development of African countries in the 21st century. It stresses that development information can only be guaranteed when libraries in Africa computerize their systems, form networks for resource sharing, and take advantage of the benefits of information technology (IT), especially CD-ROM and the Internet. An in-depth review of the information management climate of African libraries was made, and this was found to be unfavorable. Problems inhibiting IT application by African libraries include apathy and inadequate government funding, undeveloped information and communication infrastructure, and shortage of technical manpower. Despite the bottlenecks, African libraries need to efficiently and effectively manage information in the 21st century in order to facilitate technology transfer, support education and research, and project Africa's achievements to the rest of the world. Considering the widespread democratization in Africa, blueprints for improved economy, better provision of information infrastructure, and progress already made in IT application and networking, it was established that the chances of African libraries automating their services in the 21st century are very bright. The paper concludes that the challenge for taking positive steps to promote modern information management in the new millennium is not only for African libraries, but for the world at large. (Contains 24 references.) (Author/MES)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 450 781

IFLANET Search Contacts
International Federation of Library Associations and Institutions
Annual Conference

IFLA 2000 JERUSALEM
Conference Proceedings

66th IFLA Council and General Conference

Jerusalem, Israel, 13-18 August

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

A.L. Van Wesemael

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Code Number: 012-114-E
Division Number: VIII
Professional Group: Africa
Joint Meeting with: -
Meeting Number: 114
Simultaneous Interpretation: *No*

Managing information for development in the 21st century: prospects for African libraries, challenges to the world

Kenneth Ivo Ngozi Nwalo
Department of library,
Archival and Information Studies,
University of Ibadan
Ibadan, Nigeria

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Abstract

The paper discusses the vital role information can play in the development of African countries in the 21st century. It stresses that development information can only be guaranteed when libraries in Africa computerize their systems, form networks for resource sharing and take advantage of the numerous benefits of IT, especially CD-ROM and the Internet. An indepth review of the information management climate of African libraries was made and this was found to be very unfavourable. Problems found to be inhibiting IT application by African libraries include apathy and inadequate funding by governments and their officials, undeveloped information and communication infrastructure and shortage of technical manpower.Despite the bottlenecks, African libraries have the challenge to efficiently and effectively manage information in the 21st century in order to facilitate technology transfer, support teaching, learning and research, and project Africa's achievements and potentials to the rest of the world for mutual benefits. Considering the widespread democratization in Africa, blueprints for improved economy, better provision of information infrastructure, and progress already made in IT application and networking in Africa, it was established that the chances of African libraries to automate their services in the 21st Century are very bright.The paper concludes that both Africa and the rest of the world need mutually beneficial information from each other. The challenges, therefore for taking positive steps to promote modern

IR058037

information management in the new millenium is not only for African libraries but for the world at large.

Paper

Introduction

The euphoria with which the world greeted the new millenium is but an outward projection of our innermost desire for positive development. Everyone has looked up to the 21st Century as a period when all the dreams of individuals, organizations, communities and nations will be met. The world is indeed thirsty of development. However, the vision for development cannot be exactly the same for the developed world and the developing countries of Africa, Asia and Latin America. While the former group might be striving to consolidate their gains in the control of the outer space and the world's economy, the latter hope to get started with the basics. Development is associated with the progress and material well-being of men and nations.

Development is wanted to provide people with the basic necessities of life, for their own sake and to provide a degree of self-esteem and freedom for people which could be denied them by poverty. For African countries which in the last century got liberated from colonialism only to be ravaged by wars, desertification, erosion, military dictatorship, unfulfilled dreams of nationhood and all forms of natural and human calamities, the 21st Century holds much hope - hope of political stability, hope of economic prosperity, hope of technological advancement, hope of enjoying the basic necessities of life like food, shelter, medicare, education, liberty and a host of other aspirations already taken for granted by the developed world.

As has been observed by many writers, Africa and the developing world cannot leapfrog into development in the 21st Century. For our lofty dreams to be actualized there is the need to plan. There is also the need to invest a significant proportion of our national wealth to the generation, management and utilization of quality information for development. Aiyepeku (1991) perceives information as mankind's accumulated knowledge, derived from all subjects that could help its users to reduce their levels of uncertainty. Since independence, African countries have had a catalogue of long and short-term development plans the failure of which is largely attributable to lack of proper information management and utilization.

Information is at present believed to be a fifth factor of production which is by no means inferior to land, labour, capital and the entrepreneur. In fact, Brandin and Harrison (1987) observe that "information wealth is now a new type of capital described as knowledge capital". In the same vein, Drucker (1969) allerted us that the systematic and purposeful acquisition of information rather than science and technology is emerging as the new foundation for work, productivity and effort throughout the world. In what sounds like a confirmation of Drucker's prediction, Bergdahl (1989) posits that information has become such a precious resource that the fate of modern nations in all essentials is connected with their capacity to develop and exploit it. He further predicts that in future, countries that do not develop this capacity will be left behind in the cultural, scientific and economic development. Apart from suffering from dependence on others, such countries will neither be partners in the global production of information nor will they contribute meaningfully to

the common future of civilization. Bergdahl's future is already here with us.

Perhaps, it is such considerations as the need to share information resources between the information rich and the information poor across cultures for mutual benefits that have informed the theme of this year's IFLA conference: INFORMATION FOR CO-OPERATION/CREATION: THE GLOBAL LIBRARY OF THE FUTURE. This theme poses a great challenge to libraries and librarianship in Africa of which responsibility it is to manage the continent's information resources and indeed the world at large. According to Pejiova and Kavcic-Coiic (1974), "improved performance, better quality, competitiveness, environmental protection, rationalization, better deployment of resources and almost all other contemporary management issues today call for better handling and more efficient utilization of information". Africa, perhaps more than most other continents is in dire need of development if only to free her citizens from hunger, diseases and ignorance among other vices. This paper focuses on the IFLA 2000 conference sub-theme: Management of Information: Librarianship for the 21st Century. For Africa to become an active participant in the new world information order, it is imperative to introduce modern information management techniques in all her libraries. Efforts in this regard are still like a drop in the ocean. As such, it is pertinent to emphasize the need for application of information technologies (IT) by African libraries and call the attention of all concerned to the debilitating problems in achieving the desired innovation and what must be done to turn the situation around.

Current Trends in Information Management

In the past, libraries and information centres had to manually manage their information resources. The laboriousness of such practice, the attendant delay in information processing and delivery services and the general ineffectiveness of information services at the time no doubt motivated serious research into better means of information management. The high point of the research outcome is the much cherished information technologies of the present day.

According to Oketunji (1999) the information technologies found in libraries at present can be divided into three categories: computers, storage media and telecommunications. These three aspects, working together have brought about great improvement in the quantity and quality of library services to users and an amazing reduction in the delivery time. Furthermore, the fusion between computers and telecommunications; telematics has enhanced the development of information networks around the world, the highpoint of which is the internet.

With the emergence of the internet, the world has been truly reduced to a global information village. This world-wide network, though designed to serve the information needs and interests of all facets of the society, has provided a great boost to library services worldwide. It is now a well known fact that internet connectivity fosters an unparalleled degree of communication, collaboration, resource sharing and information access. The elctronic publishing of some important journals and other materials on the internet has removed the need to physically acquire such materials by libraries. While this is a big boost to the libraries that have internet access, all others, mostly in Africa and the Third World lose the benefit of making such electronically published works available to their users through the usual journal subscription channel. The implication of this development to a majority of Africa's libraries can be very grave.

With the numerous advantages of information technology widely discussed in the literature, e.g. by, Cochrane (1992) and Henderson (1992), libraries are

computerizing their services all over the world. To take advantage of the immense benefits in information management offered by IT, a library must first computerize its services. Despite this naked reality, the pace of library automation in Africa is still very slow and this should be a cause for serious concern.

Information Management Climate of African Libraries

In managing the library's information resources, the librarian has to contend with both internal and external difficulties. The state of library development in Africa is reminiscent of the general climate of under-development in the region. According to the South Commission (1990):

> Three and a half billion people, three quarters of all humanity, live in the developing countries. By the year 2000, the proposition will probably have risen to four fifths. Together, the developing countries - accounting for more than two thirds of the earth's surface..... are often called the Third World. We refer to them as the South. Largely bypassed by the benefits of prosperity and progress, they exist on the periphery of the developed countries of the North. While most of the North are affluent, most of the people of the South are poor; while the economies of the North are generally strong and resilient, those of the South are mostly weak and defenceless; while the countries of the North are, by and large, in control of their destinies, those of the South are very vulnerable to external factors and lacking in functional sovereignty.

Ironically, the foregoing description of the Third World of which Africa is at the centre stage was made a decade ago when the economies of most African countries could still be described as buoyant. In the past decade, African economies have further nose-dived to very pitiable levels owing to bad governments, military dictatorship, armed conflicts and general restiveness of the population and natural calamities including desertification, flooding, epidemic and the global inflation.

Anybody that has closely monitored foreign and Africa based mass media reports - documentary and news - on poverty, hunger and disease in parts of Africa would begin to wonder why some people are surviving at all in the Region. Many new democracies are pulled down in Africa because people are no more patient with the political class and their promises of a better tomorrow. The masses are calling for what President Obasanjo of Nigeria refers to as "dividends of democracy".

It is in the foregoing socio-economic climate that libraries in Africa have to thrive. It is in the milieu that they are expected to be efficiently and effectively managed. In every society, the library is the most dependable source of information for development. Since the government is the prime mover of development in African countries, its support or apathy over library development will chart a path for the libraries, for better or for worse. "Good information", according to Kaye (1995)", improves decision-making, enhances efficiency and provides a competitive edge to the organisation which knows more than the competitor". The situation in Africa is somewhat bizzare. As the governments and their agencies hardly rely on hard information for their development activities, the available information mostly lie and gather dust on the shelves of the originators. As would be expected, the governments in African countries accord very low priority to serious information and so hardly see the need to strongly support and fund libraries.

Neill (1991) reports that several conferences and workshops sponsored by NATIS were held in parts of Africa - Uganda (1990), Kenya (1973) and the entire Southern, Central and Eastern African region including Sudan (1974), Tanzania (1974), Kenya (1975), (1978), Malawi (1978), Lesotho (1979), Swaziland (1979), Botswana (1980) and Zimbabwe (1981). The objective of the seminars and conferences was to create a dialogue between librarians and government decision-makers, as well as to raise the consciousness and awareness of these officials of the utility and value of information in the planning and decision-making process.

After a review committee's assessment of the success recorded by NATIS through the workshops and conferences, the whole programme was found to be a mere exercise in futility. Commenting on the issue, Neill (1991) laments that:

> Government officials, planners and decision-makers exhibit an extremely low threshold of awareness with regard to the utility of information, and remain stubbornly unconvinced of its efficacy as a factor in development process. The necessary conviction that would make NATIS work is not evidenced in the top echelons of government service with people who hold the purse strings. Neither is information taken seriously at the second tier level of administrators and professionals.... In general, they rarely utilize information in their day-to-day operations and more importantly, infrequently urge their employers to provide new and improved information services. Even on planning or policy document, it is no more than a declaration of good intent that is never followed through or supported with the allocation of resources.....

It is serious enough that policy makers in Africa are not enthusiastic about seeking information that could improve the quality of their decisions. However, of greater significance to this paper is that modern management of library resources requires a firm commitment by the funding authorities that needed funds will be provided promptly. If for any reason the funds are not forthcoming to libraries in Africa, then it would be extremely difficult to apply the modern information management technologies already discussed. Apart from funding, some of the problems of information management in Africa include:

Poor State of Information Infrastructure

Modern information management requires a fairly well developed information infrastructure especially electricity and the telephone. These basic infrastructure which are already taken for granted in the developed world are unfortunately poorly provided for in Africa. Apart from South Africa and a few Southern African countries like Bostwana and Namibia, power supply in most other areas is epileptic. In Nigeria, for example, power supply is so erratic that it is generally believed that it is normal to have 'black out' and abnormal to have uninterrupted power supply for up to one hour. This is to say nothing the rural areas, which though harbour over 80% of the country's population are, in most cases, yet to be provided with electricity.

The sole electricity corporation, the National Electric Power Authority (NEPA) has dashed the hope of many, not just at industrialization but in the efficient management of hospitals, sports stadia, libraries and other such facilities requiring electricity to power their machines and other electrical and electronic devices. In a face saving move, the new Minister of Power and Steel, Chief Bola Ige, publicly apologized to all Nigerians on the 'crimes' of NEPA and promised to turn the corporation around within six months. About eight months

after that promise, the situation has deteriorated, leading to nationwide blackout for several days.

Reports from the participants at the West African Conference on Library Association Management and Networking held in Ibadan from 11-13 October, 1999 show that undependable state of electricity supply in the various countries in the sub-region is one of the most serious obstacles to library automation and networking in the area. This assertion has been confirmed by a recent survey by Nwalo which covered nine African countries - Morocco, Ghana, Senegal, Kenya, Burkina Faso, Cote D'Ivoire, Sierra Leone, Benin Republic and Nigeria. The result of the survey shows that in a checklist of ten items on hindrances to library automation, infrequent power supply and poor telephone facilities ranked among the top three. Other problems include inadequate funding and apathy of government officials. Thus, the twin problems of shortage of electricity supply and poor telephone facilities in most African countries constitute a clog in the efforts to introduce modern information management techniques in the libraries and information centres.

Problems of Computer Hardware and Software

The application of computers to various human enterprises in Africa is still relatively new. This factor, coupled with the weakness of currencies of African countries in the foreign exchange market have made the prices of computer hardware and software unaffordable by many libraries. The matter is further made worse by the too many middlemen in the local computer market all of whom try to maximize profit. Government policies in most cases favour resort to tender and contract in the supply of office equipment rather than direct purchase from reputable firms. As such, libraries could end up paying about four or more times the normal price of computers and the accessories whenever they have to acquire the system. For African libraries that are generally poorly funded, the high cost of acquiring computer hardware and software could be a deterent to many which are thinking of automating their information management systems.

Shortage of Technical Manpower

Computer engineers and technologists are still very few in Africa relative to the demand. The result is that the cost of maintenance of automated library systems becomes prohibitive as libraries compete for the services of the very few maintenance personnel available in their localities. Many attempts at library automation in African countries are known to have failed because of system maintenance problems.

Challenges for African Libraries

In spite of the myriad of problems in the way of libraries in Africa to apply modern information management techniques, they are likely to have very little choice in this 21st Century. As Africans are clamouring for development so is the world focussing more attention on the potentially dangerous situation in Africa, albeit, for diverse purposes. To meet the legitimate aspiration of the people for rapid socio-political and economic development, the libraries, being engines of development are faced with serious challenges. These include:

Technology Transfer: The libraries need to be at the vanguard of technology transfer from the developed world to the developing economies of Africa. To meet this expectation, the African library must provide a link between local

researchers, teachers and scholars and their counterparts in other parts of the world. Internet connectivity, for example, is about the surest way of achieving this objective. All users of the Internet enjoy a whole range of services such as electronic mail, file transfer protocol, database access, and so on.

Unfettered access to databases around the world through the Internet offers a great opportunity for scientists and technologists in Africa to acquire knowledge from their colleagues elsewhere. The Internet could also afford African scientists and technologists the opportunity to collaborate with their counterparts around the world on research projects.

Arunachalam (1999) calls attention to the fact that, increasingly, research is carried out by multinational teams. According to him, there has been an enormous increase in recent years in the number of research papers resulting from international collaboration. Citing the National Science Foundation, Science and Engineering Indicators (1998) Arunachalam laments that whereas the number of papers with international co-authors rose by 200% from 1981 - 1995 more than 80% of such co-authored articles involved writers from the developed countries while only 1.8% involved authors from Africa.

For African researchers to be able to collaborate more significantly with their counterparts in other parts of the world, they need access to the internet especially through their local libraries. It must be reiterated that such a collaboration between researchers from Africa and their counterparts in the West and North is highly desirable as it can promote technology transfer.

Provision of Teaching and Research Facilities: The economies of most African countries have so seriously declined that they are unable to provide basic teaching and research facilities in their tertiary institutions and research institutes. To provide their users access to the best of teaching and research materials available in the world, timely, and at least cost, African libraries must automate their services and form networks. Most of the problems associated with acquisitions and collection management in general would be over for African libraries once they are on the web.

Moreover, the CD-ROM technology affords libraries in Africa a unique opportunity to acquire information materials to meet the needs of their users. Ephraim (1991) and Ojo-Igbinobia (1993) have extolled the virtues of the CD-ROM and highlighted its potentials for researchers in Africa. Apart from storage space economy, the CD-ROM provides access to information held by important databases without laying cables. This is very significant considering that lack of good telephone services is one of the major obstacles to computerization and networking by libraries in Africa.

Furthermore, Levy (1990) posits that full text compact discs might also prove more secure than print copy; it is impossible to mutilate them by cutting out pages to be taken home. Mutilation and stealing of information materials is known to be a serious problem facing libraries all over Africa (Obikoya, 1994; Bello, 1997; Olanlokun, 1999).

Sustenance of Journal Subscription: As publishing goes electronic, many primary journals and secondary services previously acquired by libraries through normal subscription to hard copies can only be accessed through the internet. Arunachalam (1999) has hinted that publications such as Current Contents Connect, SciFinder (Chemical Abstracts) and multidisciplinary citation indexes such as Web of Science are available on the World Wide Web, though at a fee that most university and research libraries in developing

countries cannot afford.

Grantled the cost implication to libraries of developing countries, including Africa to access to journals published on the internet is very high. However, of even greater concern is that any library that is not computerized has, as it were, automatically cut off its users from access to important journals available only on the World Wide Web. This development poses a great challenge to African libraries who have the onerous responsibility to meet the information needs of the users especially for research and development.

Projection of Africa to the World: Africa is very rich in culture and has great tourism and investment potentials. While documentation and other records on African cultural heritage and investment potentials abound locally, such information are yet to be sufficiently marketed to the outside world. With the opportunities offered by modern information management, African libraries have a great chance of projecting Africa positively to the world thereby attracting foreign investments and promoting tourism. In spite of everything, abundant indigenous knowledge, the outcome of local research efforts into various fields of life, including agriculture, medicine, science and technology abound all over Africa. These are scattered on library shelves and in private offices in form of grey literature and are largely unutilized. Since such materials can easily become part of the collections of libraries in Africa, such indigenous knowledge could be projected to the rest of the world through the Internet. For this to happen, African libraries must embark on aggressive acquisition of Africana publications, including grey literature, computerize their information management and form library networks. Such library networks in Africa will surely boost development through the provision of serious development information appropriate to the African environment.

So far, much of the information on Africa in the world's information networks tend to project only the negative tendencies and situations of Africa and Africans. It is noteworthy that such tendencies are found with all peoples and nations. While African libraries should not be merely out to counter the negative information about Africa, there is serious need to project to the whole world the positive sides of Africa and the achievements of Africans often swept under the carpet. Many feats have been performed by Africans in various fields of life but these are hardly given publicity by the Western press. For example, about 1978, one Damian Anyanwu, a high school leaver from Nigeria performed a feat by transmitting on **Radio Mbaise** by the mere use of local herbs and leaves. Should Africa fail to blow its own trumpet, nobody may ever blow it for her. In fact, her trumpet may even be snatched from her to make it impossible for Africa to be ever heard.

Prospects for Modern Management of Development Information in Africa

In an address at the opening ceremony of the West African Conference on Library Association Management and Networking recently held in Ibadan under the sponsorship of IFLA, African Section, Nigeria's Ag. National Librarian, Mrs. O. O. Omolayole lamented the inability of African libraries to obtain information about publishing in Africa without having to rely on catalogues published in Europe and America. She further declares:

> The focus of the conference is ....very relevant. Because of our similar cultures and problems as developing nations, we need to have closer interaction by way of information sharing for our mutual benefit. We are

aware of the new technologies and their application to library processes. There is an urgent need for us to begin to exploit these facilities otherwise the rest of the world would leave us behind. It is a fact that it is costly but neglecting to take advantage of them would cost us more. Each of our libraries must begin to use them and build up gradually to enhance the effectiveness and efficiency of information collection, processing, storage, dissemination and preservation. Indeed, any meaningful co-operation would depend on the use of these facilities....

The foregoing contribution at the conference tends to capture the enthusiasm and determination by the participants that it is "forward ever and backward never" for librarianship and libraries in Africa. Indeed, there are high prospects of modern information management by African libraries in the 21st Century. Such prospects are predicated on several factors including:

- Democratization in Africa: The military dictatorship that characterized most of Africa in the last century resulted in the wastage of national resources on activities and projects which were selfishly motivated. But for the 'hiccup' in Cote D'Ivoire, it can be safely said that Africa has put the experience of military dictatorship behind her. With democratic governments in the Region, chances are that a systematic and more populist approach to development will be taken. In such a dispensation, more information will be sought for planning and so libraries are likely to receive greater attention.
- Improved Economy of African Countries: With a stable polity, the economy of African countries is expected to greatly improve in the New Millenium. Already there are strong indications that the Western nations are more disposed to assist the young democracies in Africa stabilize through comprehensive economic aid. The U.S., for example, has recently announced a comprehensive plan of economic assistance to countries in Africa. On the domestic front, governments in Africa appear to be determined more than ever before to take bold steps at economic reconstruction. Once the economies improve, many problems of library automation like high cost of hardware acquisition and inadequate funding, everything being equal, will be reduced to the barest minimum.
- Improved Information and Communication Infrastructure: The deplorable state of information and communication infrastructure in parts of Africa is known to be a major bottleneck to modern information management. Whereas the International Telephone Union (ITU), recommends one telephone to a hundred persons, the Nigerian telephone density by 1996 was only about 0.66 line per 100 inhabitants. For the same period, Japan's teledensity was 64 per 100, USA 96 per 100, Taiwan 40.5 per hundred and Brazil, 10 per 100 persons respectively (Adeyinka, 1997). According to a March 1999 International Telecommunication Union (ITU) report, teledensity in many African countries is less than 0.05 per 100 inhabitants. This ugly situation, is however, expected to change for the better in the near future. The Nigerian Communication Commission, for example, has been taking bold steps to deregulate the telecommunications industry in the country. So far, over 35 firms have been licensed in different aspects of communication business,11 of which are Internet Services providers.

Furthermore, the Nigerian government is seriously pursuing a programme of deregulation and privatization of its telecommunications and energy sectors. In the meantime, the cost of acquiring a telephone line has been drastically cut by the new Obasanjo government from N50,000 (about 500 Dollars) to N20,000 (about 200 dollars). Technical committees on commercialization and privatization have already been set up by the government for the two sectors

and it is only a matter of time for the benefits of the exercises to be reaped. Most other African countries are also known to be taking serious steps to improve their information and communication infrastructure as part of the overall effort at national development.

- Rejuvenation of National and Regional Library Associations: Reference has already been made in this paper to the West African Conference on Library Association Management and Networking held at Ibadan, from 11-13 October, 1999. Contributions by various participants at the conference showed that many national library associations in the West African Sub-region had ceased to be active because of one problem or the other. However, by the end of the conference, all participants most of whom are leaders in librarianship profession of their countries expressed their determination to give their countrys' Library Associations a new lease of life upon their return. Strong national library associations are necessary to promote high professionalism and act as a pressure group on the government of the day to lend active support to library development issues.

Another major achievement of the conference was the re-enactment of the defunct West African Library Association with Professor Christine Kisiedu of Ghana as the interim chairman. The mission of WALA is to provide leadership for development programmes and implementation of library and information services in the West African Sub-region in particular and the African continent in general and to stimulate and strengthen national Library Associations in member countries in order to engender access to information for all towards the ultimate goal of African development. It is hoped that WALA will live up to its mission statement and that Library Associations in the other sub-regions of Africa are equally going to rally round each other for more purposeful information management in their areas very early in the 21st Century.

- Progress in IT Application in Africa: Though the pace of IT application in Africa's libraries has not been encouraging, concerted effort is being made all over Africa to implement the technology. A significant number of the notable libraries in Nigeria especially the National Library of Nigeria and over 30 academic and special libraries have implemented IT to varying degrees. Many more plan to automate their services in the near future. The computerized libraries include:
- IITA Ibadan, Library;
- Kenneth Dike Library, University of Ibadan;
- Nigerian Institute of Economic and Social Research (NISER) Library, Ibadan;
- The Development Policy Centre (DPC) Library, Ibadan;
- The IAR&T, Moore Plantation Library, Ibadan;
- The Redemptorist Community Library;
- The IFRA Library, University of Ibadan;
- The British Council Library, Ibadan;
- NCEMA Library, Ibadan;
- E. Latude Odeku Medical Library, University College Hospital, Ibadan;
- The Society Mission of Africa (SMA) Library, Ibadan;
- Ladoke Akintola University Library, Ogbomoso;
- University of Lagos Library;
- The National Library of Nigeria, National Documentation Centre (NIDOC) Abuja
- The Nigerian Institute of International Affairs (NIIA) Library, Lagos;
- The Federal Institute of Industrial Research Oshodi (FIIRO) Library;
- The Institute of Chartered Accountants of Nigeria (ICAN) Library, Lagos;

- The Centre for Management Development (CMI) Library, Lagos;
- The Ikoyi Club Library, Lagos;
- NUC Library, Abuja;
- ECOWAS Library, Abuja;
- Raw Materials Research and Development Council (RMRDC) Library, Abuja;
- Nigerian Educational Research and Development Council Library, Abuja;
- The British Council Library, Lagos;
- The United States Information Service (USIS), Lagos;
- Dominican Community, Ibadan Library;
- The Nigerian Institute for Fresh Water and Marine Research (NIOMR) Library, New Bussa;
- Federal University of Technology, Owerri (FUTO) Library;
- Ahmadu Bello University Library, Zaria;

The rate of library automation in Nigeria is still relatively low, considering that the country has over 1000 libraries. However, the success recorded by the few that have automated their services is expected to motivate others to apply IT in the near future.

Among the Southern African countries, Botswana appears to be taking the lead in library automation. Adeniran (1997) reveals that, of the nine academic and research libraries surveyed, six were computerized while others were seriously considering doing so. Chisanga (1996) studied computerization in the Southern African Development Community (SADC) Preferential Trade Area (PTA), Eastern and Southern African region made up of 25 countries. Questionnaire were sent to 25 university libraries which were thought to have implemented automated systems in 12 of the countries. Out of 20 copies of the questionnaire completed and returned, 18 libraries were found to have computerized either part or all of their functions. The study also reported a widespread use of CD-ROM technology and various databases in the libraries. A recent survey by Nwalo shows that out of the nine African countries studied, all have libraries that have implemented IT. Consciousness of all the countries to the need for IT application in library information management was also found to be very high. There is no doubt that the momentum will be sustained in the 21st Century.

- Manpower development: Shortage of manpower for the implementation of IT programmes of libraries in Africa has been a big problem. Many attempts at library automation in Africa are known to have failed because of the high turnover of systems analysts who abandon the computerization programmes mid-stream in search of greener pastures. One of the findings of Adeniran (1997) is that out of the 18 libraries found to have computerized their services, only three (16.7%) had qualified library systems analysts in their establishment. The rest made use of external consultants for the computerization projects.

Conscious of the manpower problem, libraries all over Africa have been exposing their staff to computer literacy programmes. Some have also been sending selected staff to specialized training on computer information management locally and overseas. Kenneth Dike library, University of Ibadan has had cause to send two of its key automation staff to Britain for training at a very high cost.

Another good development is that library schools in Africa are bracing up to the challenge by revising their curricula to strongly accommodate practical education and training in IT. The Department of Library, Archival and Information Studies, University of Ibadan, for example, has recently acquired

eight computers for teaching and practice purposes by the lecturers and students. Effort is also being made to acquire more to meet the fairly high student population. The curricula at both the undergraduate and post-graduate levels are also being overhauled to be strongly IT biased. Accordingly, the National Conference on Library and Information Science Educators in Nigeria (NALISE) held at the University of Ibadan, from 4-7 August, 1999 resolved that all the library schools should strongly teach IT to their students and provide facilities for computer practicals. Once this type of resolution is widely implemented by library schools in Africa, the problem of manpower shortage for library automation programmes will be greatly reduced.

- Development of Information Networks in Africa: Sanni (1999) discusses a number of network development efforts in Africa. These include:
  - **PADISNET** (Pan African Documentation Centre Network) - This is a project to interconnect centres performing research on planning of development in some African countries into a network for data and information exchange;
  - **WEDNET** - A project to link researchers working on women's projects for the management of national resources in Senegal, Ghana, Burkina Faso, Nigeria, Sudan, Kenya, Zimbabwe and Canada;
  - **CABECA** - (Capacity Building for Electronic Communication in Africa) - This is a project to promote computer networking throughout Africa., It is sponsored by the Pan Africa Development Information System (PADIS) of the United Economic Commission for Africa (UNECA). CABECA is funded by the IDRC, Canada to achieve low cost electronic connectivity in some countries of Africa. Already, it has established nodes in some parts of the Region.
  - **RINAF** (Regional Information Network for Africa) - The Project was conceived by the Intergovernmental Information Programme (IPP) of UNESCO, financed by the Italian Government and with a contribution from the Republic of Korea. The project is aimed at bringing basic Internet Services to several African countries. RINAF has co-ordinating centres in Nigeria, Algeria, Senegal, Kenya and Zambia
  - **OAUNet** (Obafemi Awolowo University Network). This is a joint research project between Obafemi Awolowo University, Ile Ife, and the Abdus Salaam International Centre for Theoretical Physics - OAU/ICTP Project. It is designed to remove the isolation suffered by researchers in the sub-region by integrating them via network with their counterparts in other parts of the globe and to create linkage among the researchers themselves.

A very laudable initiative at networking and co-operation in Africa, the African Virtual University (AVU) has been discussed by Aguti (1999). The African Virtual University provides a network for distance education in Africa. The participating countries in Africa include Benin Republic, Burkina Faso, Burundi, Ethiopia, Ghana, Mauritania, Namibia, Niger, Rwanda, Senegal, South Africa, Tanzania, Uganda and Zimbabwe.

Hosted by Kenyatta University, Kenya and Makerere University, Uganda, the AVU provides satellite-based distance education network for students, faculty and professionals involved in distance education. Through the AVU, the various African countries and the distance learning centres have access to teaching and learning resources on-line and share multi-media information. The network is a World Bank assisted project with potentials for promoting co-operative information acquisition, organization and dissemination in the entire African region for rapid educational and socio-economic development.

There are certainly many other networks all over Africa not listed here. Considering the existing information networks in Africa, there is no doubt that the networking capabilities of African libraries will be greatly enhanced in the 21st century. Once the libraries can put their houses in order and establish local networks, these can under proper arrangement be interconnected with the existing networks. A major criticism of the information networks in Africa is that they have been initiated and entirely funded by bodies outside Africa. The implication of this is that whenever such sponsoring bodies do withdraw their support the systems are most likely to fail. For sustainability, it is important for African countries to take the initiative on information networks and to be committed to funding them, at least, jointly with donor agencies and nations. It is only then that whatever networks established can serve the best interest of Africa in terms of priority and sustainability.

Conclusion

Information for the development of any nation can be both indigenous and international. For African countries to harness information from local sources and overseas, the application of modern information management techniques is a sine qua non. The librarianship profession in Africa has not been lacking in the knowledge of the right steps to take in managing information for development. It has had to battle with very unfavourable climate of information provision and management, a climate that must improve to give way to progress in the New Millenium.

Africa has much to offer to the world just as the world has much to offer to Africa. One therefore expects governments of the West and international development agencies and institutions to do more in developing information infrastructure and institutions, especially libraries in Africa in the 21st Century. It is interesting to note that the United Nations is greatly concerned about the wide disparity in access to basic communication and information services between the developed and the developing world. In a statement issued by its Administrative Committee on Coordination in 1997, the UN laments that the information technology gap and related inequities between industrialized and developing nations are widening and that a new type of poverty, information poverty looms. The statement therefore commits the organizations of the United Nations to assist developing countries in redressing the present alarming trends. One hopes that the UN"s statement will be matched with positive action so that the developing countries of Africa will be empowered to become active participants in the new world information order.

As development issues, especially science and technology are international, there is need for African countries to access and utilize information for development, no matter the format, no matter the source. The challenge to do this is much for libraries in Africa and their sponsors as indeed, it is for governments and stakeholders outside Africa.

References

Adeniran, O. R. (1997). Computerization Efforts in Botsowana Libraries: A State of the Art Review. Afri. J. Libr., Arch. and Inf. Sc. Vol. 7(2) pp. 125-135.

Adeyinka, F. M. (1997). The Nigerian telecommunications sector in Nigeria in 2010. Edited by Adetokun O. Philips and S. 'Tunji Titilola, Ibadan. Nigerian Institute of Social and Economic Research (NISER). pp 251-259.

Aguti, J.N. (1999) The Challenges of virtual campus in a developing country. Paper read at the International Conference on Communication in the Third Millennium: Which Way, Africa, Makerere.

Aiyepeku, W. (1991) Toward a national information and informatics policy (Commissioned paper presented at the seminar on Libraries and Information Services for National Development, Lagos, 17-19, September, p.29.

Arunachalam, S. (1999). Information and Knowledge in the age of electronic communication: a developing country perspective. Journal of Information Science, 25(6) pp.465-476.

Bello, M. A. (1997). "Library security, material theft and mutilation in technological university libraries". Library Bulletin: Nigerian university library system vol. 2, no. 102.

Berghahl, B. (1989). IFLA's Programme Advancement of Librarianship in the Third World ALP: A proposal for the Future. Stockholm: Swedish Library Association, 41 p.

Brandin, D. H. and Harrison, M. A. (1987) The Technology war: A Case of Competitiveness. New York: John Wiley and Sons Inc. 244p.

Cochrane, P. A. (1992). Information technology in libraries and Ranganathan's five laws of Library Science. Libri 42(3). pp 235-241.

Drucker, P. P. (1969) The knowledge economy in the age of discontinuity. London: Heinemann, pp 247-268.

Ephraim, P. E (1991) The development of CD-ROM and its potential for African researchers. Journal of Information Science 17 (5) p.302.

Henderson, F. (1992) Relationship with users In Information Technology in special Libraries Margaret Britting (ed). London: Routledge, pp 99-106.

Levy, Lisbeth A. (1990) Computer and CD-ROM Compatibility in Sub-saharan African University and Research Libraries. Washington D.C: American Association for the Advancement of Science (AAAS). pp 2-3.

National Science Foundation, Science and Engineering Indicators 1993. National Science Foundation, Washington DC. P.xx.

Neill, J. R. (1991) The Marginalized workforce: Africa's library and information profession. Afri. J. lib. Arch & Inf. Sc. vol. 1 no. 1. pp9-18.

Nwalo, K. I. N. Reference is to a survey on automation in African libraries which is yet to go to press.

Obikoya, A. (1993). Theft and mutilation in academic library Nigerian libraries vols. 27 and 28.

Ojo-Igbinoba, M. (1993). The potential of CD-ROM technology in African Libraries Afri. J. Lib., Arch. and Inf. Sc. Vol. 3, No. 2, pp. 157-165.

Olanlokun, O. S. (1999). Library security: The library manager's perspective, paper presented at the national workshop of library resources, Nigeria Institute

of Advanced Legal Studies, July 6-8.

Omolayole, O. O. (1999). Goodwill Message at the Opening Ceremony of the West African Conference on Library Association Management and Networking held at the Conference Centre, University of Ibadan, October 11-13.

Pejova, Z and Kavcic-Colic, A. (1994). "Information Actions for Enterprises Operating under New Realities: Case Study of Slovenia". In Alvarez-Ossorio, T. R. and Goedegebuure, B. G. (eds) New Worlds in Information and Documentation. Amsterdam: Elsevier. pp. 397-409.

Reynolds, D. (1985). Library Automation: Issues and Applications. New York: R. R. Bowker. pp. 159-186.

Sanni, S. A. (1999). "Information and Communication Technology (ICT) Infrastructure and Delivery in the West African Sub-Region": Lead Paper Presented at the IFLA Africa Section Conference on Library Associations Management and Networking held at the University of Ibadan, 11-13 October.

United Nations (1998). World Telecommunications Development Report, 1998 - Universal Access.- Geneva, International Telecommunication Union, p.3.

Latest Revision: *May 8, 2000*

Copyright © 1995-2000
International Federation of Library Associations and Institutions
www.ifla.org